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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/957,014	09/20/2001	Richard Francis Russell	2001-0158.02	3768

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EXAMINER

PRIETO, BEATRIZ

ART UNIT	PAPER NUMBER
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2142

5

DATE MAILED: 07/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

pre

Office Action Summary

Application No.

09/957,014

Applicant(s)

RUSSELL ET AL.

Examiner

B. Prieto

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is in response to application No. 09/957,014, claims 1-25 remain pending and are hereby set forth for examination.
2. Drawings have been reviewed/approved by Draftsperson. Further, an Information Disclosure Statement (IDS) has been noted as an entry (Paper # 7, filed 7/20/01) in the file wrapper, however no paper where found. Applicant is requested to kindly resubmit this IDS marked ("COPY") in his/her response to this first office action on the merits, for proper consideration.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Cheshire, S. Current Meeting Report, Cheshire et. al. (Cheshire), 03/1999.

Regarding claim 1, Cheshire discloses an auto-configuration IP assignment to new devices, the method including the steps of:

a computer node communicatively coupled on a LAN network and a network ("adapter") interface to communicatively coupling a device to said network (page 2), said computer performing the steps of:

incorporating a randomly generated internet protocol address in an address resolution protocol (ARP) probe (page 3);

sending said ARP probe (i.e. broadcast query) on said network for verify whether a response (by a communicatively coupled recipient) to said ARP probe indicates that said internet protocol address is in use or not (page 3); and

if said internet protocol address is not in use, then assigning said internet protocol address to said network interface (page 3).

5. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheshire in view of Reed et. al. (Reed) U.S. Patent No. 6,061,739.

Regarding claim 2-5, iterating i.e. repeating said generating step, said incorporating step, said sending step and said determining step for at least a predetermined number of times (Cheshire page 3), however Stuart does not explicitly teach wherein the predetermined number is 30;

Reed teaches a first host computer incorporating a generating an internet protocol address in a address resolution protocol probe broadcast request (col 2/lines 20-30),

sending said address resolution on an Ethernet LAN network for determining if an internet protocol address is in use (col 2/lines 20-30);

wherein the number of requests is a preset threshold (col 4/lines 19-20) and first specified time interval to wait for a response are programmable values (col 5/lines 28-33);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to include means for repeating said generating step, said incorporating step, said sending step and said determining step for at least a predetermined number of times (e.g. 30), motivation would be to program the number of request issues and the time to wait for a response based on network environment factors such as network latency and its dependency on network traffic, distance and the characteristic of the communication links.

Regarding claim 6, if said number of times said generating step is performed exceeds said predetermined number then said computer fails to automatically assign said network adapter an internet protocol address (Cheshire: page 3).

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheshire in view of Reed in further view of Mellquist U.S. Patent No. 6,115,545.

Regarding claim 7, although prior art discloses sending an ARP probe message (i.e. "broadcasting discovery packet") on said network; and determining if said network adapter has a "valid" internet protocol address, it does not explicitly teach determining if internet protocol address is valid

Mellquist teaches that in order to configure a device with an internet protocol address it is required that a free address in the range of valid unique addresses must be selected and that a sub-net

mask having a mask that must be the same on all entities across the sub-net is required (col 3/lines 11-19);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to ensure that a unique valid internet address is used to configure a network device, as taught by the reference, where such validation includes verifying that an internet protocol address having the same mask as all entities on the subnet, motivation would be verify that applied address meet all requirements that ensure proper operation, to avoid major problems as suggested by Mellquist.

6. Claims 8-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheshire-Reed in view of Mellquist U.S. Patent No. 6,115,545 in further view of Request for Comments (2563), Troll, May 1999

Regarding claim 8, however the above-mentioned prior art of record does not explicitly teach determining whether said network allows said computer to assign an internet protocol address to network devices, prior to generating step;

Troll teaches client nodes configured to be able to determine whether or not the network is being centrally administrated, allowing it determine whether or not it should assign itself a IP (link-local) address (page 2), including an Auto-configure option which allows a computer node to determine whether or not it should generate an IP address (page 3) (i.e. prior to performing the generating step).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to utilize the Troll teachings to implement determining whether said network allows said computer to assign an internet protocol address to said network adapter, motivation would be to enable the flexibility of an Auto-configure Option along with the IP address assignment that notifies the client that the network does not have an IP address to offer upon determining the absence of an DHCP server.

Regarding claim 9, said device is a printer (Cheshire: page 5).

Regarding claim 10, said network adapter is a ("low-cost") network interface (adapter)(Cheshire: page 3).

Regarding claim 11, this claim is substantially the same as claims 1 and 7 as discussed above, same rationale of rejection is applicable.

Regarding claim 12, wherein if said internet protocol address is in use, then further comprising the step of repeating said generating step, said incorporating step, said sending step and said determining step (Cheshire, page 3).

Regarding claims 13-16, these claims are substantially the same as claims 3-6 respectively, same rationale of rejection is applicable.

Regarding claim 17 this claim comprised a network based ("imaging") system, including limitations on claims 1-10 when combined including the instructions executable on a computer to perform the method steps disclosed on the method claims 1-10, same rationale of rejection is applicable.

Regarding claims 18-22, these apparatus (system) claims are substantially the same as the method claims 3-6 respectively, same rationale of rejection is applicable.

Regarding claims 23-24, these apparatus (system) claims are substantially the same as claims 7-8 respectively, same rationale of rejection is applicable.

Regarding claim 25, this apparatus (system) claim is substantially the same as the method claim 10, same rationale of rejection is applicable.

Citation of Pertinent Art:

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure; Copies of documents cited will be provided as set forth in MPEP§ 707.05(a):

1. Network Working Group: Request for Comments (2563): DHCP Option to Disable Stateless Auto-Configuration in IPV4 Clients, Troll, R., @Home Network, May 1999.

Troll discloses self-assigning an address for the computing device on an ad hoc network by selecting an address which will allow the computing device to communicate on the ad hoc network, wherein in the absence of a central configuration mechanism (DHCP), some OS's are automatically choosing a link-local IP address which will allow them to communicate only with other hosts on the same link, thereby describes a mechanism by the client is configure to generate an IP address it's own. The method describes a method by which DHCP clients will be able to determine whether or not the network is being centrally administrated, allowing it to intelligently determine whether or not it should assign

itself a "link-local" address, thereby, the client node may automatically and selectively assign itself an IP address, and have full connectivity with other nodes on the local wire.

2. Network Working Group: Request for Comments (1048): BOOTP Vender Information Extensions, Prindeville, P., McGill University, Feb 1988, pages 1-7.

Prindeville discloses Bootstrap Protocol (BOOTP), as a UDP/IP-based protocol that allows a booting host to configure itself dynamically, and more significantly, without user supervision, providing a means to assign a host its IP address, a file from which to download a boot program from some server, that server's address, and (if present) the address of an Internet gateway. The multicast approach has the following advantages over the BOOTP approach, is that it eliminates dependency on a third party (the BOOTP server) that may be temporarily unavailable or whose database may be incorrect or incomplete.

3. U.S. Patent No. 6,243,749 (06/2001)

Sitaraman et. al. teaches broadcast announcement message on a broadcast communication channel informing of a computing device's assigned address; broadcasts the information regarding the newly assigned IP address to each subscribing DNS server, the broadcasting may take the form of sending an allocation event message throughout the network containing the appropriate information.

4. U.S. Patent No. 6,130,892 (10/2000)

Short et. al. teach a promiscuous mode entered upon having no available DHCP service on the network from which a computing device (10) passively is able to learn how the network is configured and enables it to elect to use an unused IP address. If that IP address become used by another device, it will switch over to another unused IP address.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (703) 305-0750. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Mark R. Powell can be reached on (703) 305-9703. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6606. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks
Washington, D.C. 20231

or Faxed to:

(703) 746-7239, for Official communications and entry

Or:

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Or Telephone:

(703) 306-5631 for TC 2100 Customer Service Office.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington VA, Fourth Floor (Receptionist), further ensuring that a receipt is provided stamped "TC
2100".



B. Prieto
TC 2100
Patent Examiner
July 17, 2003



ROBERT B. HARRELL
PRIMARY EXAMINER